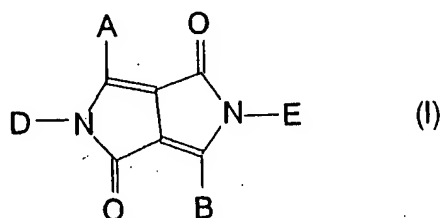


Serial No.: 10/642,212

IN THE CLAIMS:

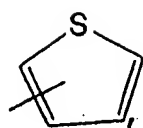
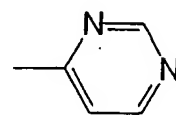
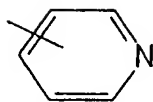
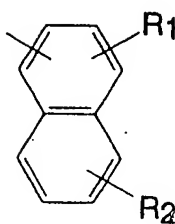
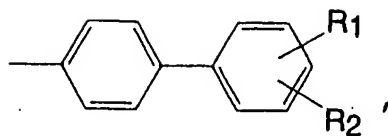
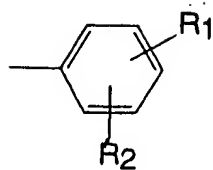
1. to 52. (Canceled)

53. (Original) A color filter comprising a colored layer as colored pixels provided on a transparent substrate, said colored layer containing a pyrrolo[3,4-c]pyrrole derivative produced by converting at least one ketopyrrole group in a pyrrolo[3,4-c]pyrrole of formula

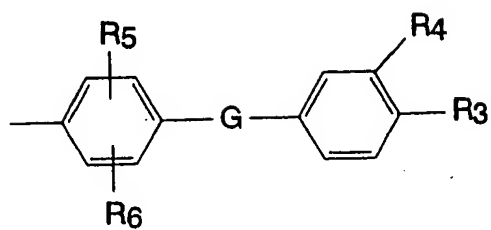


wherein A and B are each independently of the other a group of formula

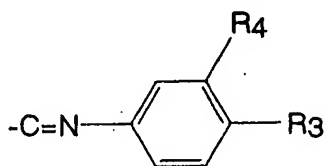
Serial No.: 10/642,212



, or

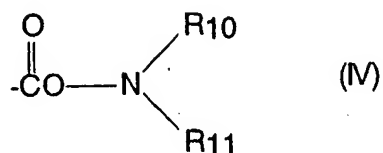
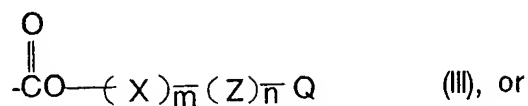
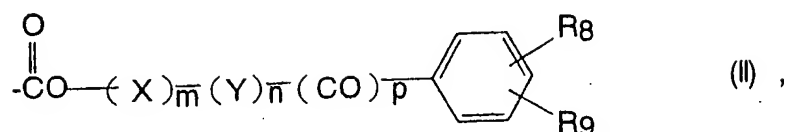


wherein  $R_1$  and  $R_2$  are each independently of the other hydrogen, halogen,  $C_1-C_{18}$  alkyl,  $C_1-C_{18}$  alkoxy,  $C_1-C_{18}$  alkylmercapto,  $C_1-C_{18}$  alkylamino,  $-CN$ ,  $-NO_2$ , phenyl, trifluoromethyl,  $C_5-C_6$  cycloalkyl,  $-C=N-(C_1-C_{18} \text{ alkyl})$ , a group of formula



imidazolyl, pyrrazolyl, triazolyl, piperazinyl, pyrrolyl, oxazolyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, morpholinyl, piperidinyl, or pyrrolidinyl; G is  $-CH_2-$ ,  $-CH(CH_3)-$ ,  $-CH(CH_3)_2-$ ,  $-CH=N-$ ,  $-N=N-$ ,  $-O-$ ,  $-S-$ ,  $-SO-$ ,  $-SO_2-$ , or  $-NR_7-$ ;  $R_3$  and  $R_4$  are each independently of the other hydrogen, halogen,  $C_1-C_{18}$  alkoxy, or  $-CN$ ;  $R_5$  and  $R_6$  are each independently of the other hydrogen, halogen, or  $C_1-C_6$  alkyl; and  $R_7$  is hydrogen or  $C_1-C_6$  alkyl; and

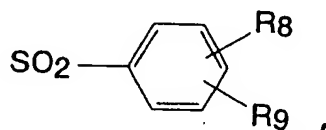
D and E are each independently of the other a group of formula



wherein, in the formulae (II), (III), and (IV),  $\bar{m}$ ,  $\bar{n}$ , and  $\bar{p}$  are each independently of one another a number of 0 or 1; X is  $\text{C}_1\text{-C}_{14}$  alkylene or  $\text{C}_2\text{-C}_6$  alkenylene; Y is a group  $-\text{V}-(\text{CH}_2)_q-$ ; Z is a group  $-\text{V}-(\text{CH}_2)_r-$ ; V is  $\text{C}_3\text{-C}_6$  cycloalkylene; q is an integer from 1 to 6; r is an integer from 0 to 6;  $\text{R}_8$  and  $\text{R}_9$  are each

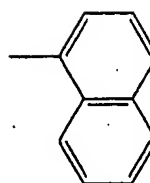
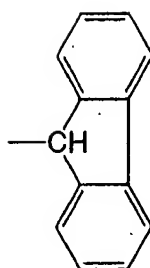
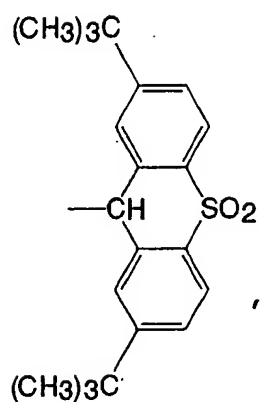
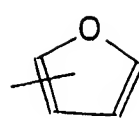
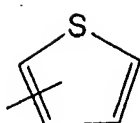
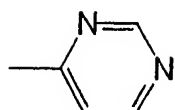
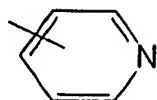
Serial No.: 10/642,212

independently of the other hydrogen,  $C_1-C_6$  alkyl,  $C_1-C_4$  alkoxy, halogen, CN,  $NO_2$ , unsubstituted phenyl or phenoxy, or phenyl or phenoxy which is substituted by  $C_1-C_4$  alkyl,  $C_1-C_4$  alkoxy, or halogen; and Q is hydrogen, CN,  $Si(R_8)_3$ , a group  $C(R_{12})(R_{13})(R_{14})$  wherein  $R_{12}$ ,  $R_{13}$ , and  $R_{14}$  are halogen, a group of formula

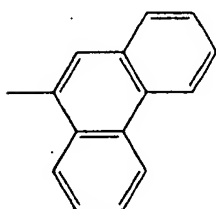


wherein  $R_8$  and  $R_9$  are as defined above,  
a group  $SO_2R_{15}$  or  $SR_{15}$  wherein  $R_{15}$  represents phenyl which is substituted by a  $C_1-C_4$  alkyl, a  $C_1-C_4$  alkoxy, or a halogen,  
or a group of formula

Serial No.: 10/642,212

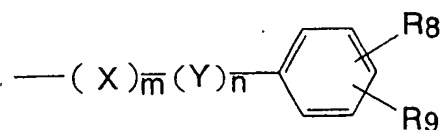


, or



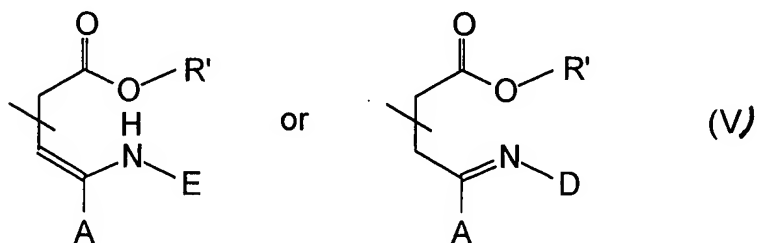
; and

$R_{10}$  and  $R_{11}$  are each independently of the other hydrogen,  $C_1-C_{18}$  alkyl, or a group of formula



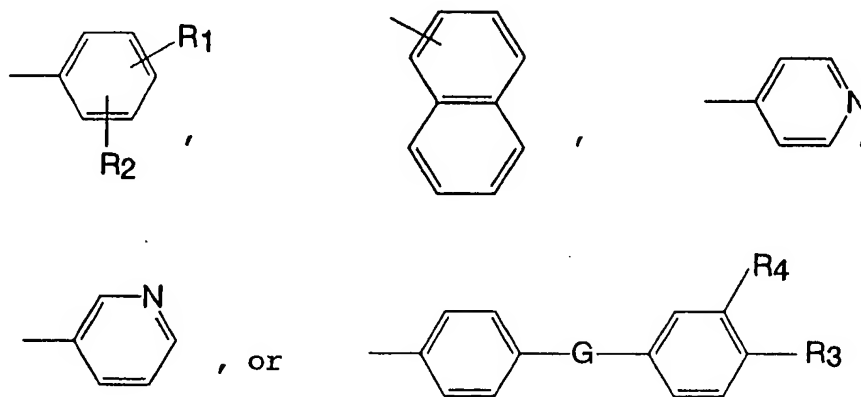
wherein  $X$ ,  $Y$ ,  $R_8$ ,  $R_9$ ,  $m$ , and  $n$  are as defined above, or  $R_{10}$  and  $R_{11}$ , together with the linking nitrogen atom, form pyrrolidinyl, piperidinyl, or morpholinyl radical; and  $D$  may be hydrogen, with the proviso that, if  $D$  and/or  $E$  are a group of formula (III),  $Q$  is hydrogen, and  $n$  is 0,  $m$  must be 1 and  $X$  must be a  $C_2-C_{14}$  alkylene or  $C_2-C_8$  alkenylene group which is branched at the carbon atom attached to the oxygen atom,

said at least one ketopyrrole group being converted to



wherein A may be B with the proviso that, if A is B, D is E; and R' is C<sub>1</sub>-C<sub>5</sub> alkyl.

54. (Original) The color filter according to claim 53, wherein A and B in formula (V) are each independently of the other a group of formula

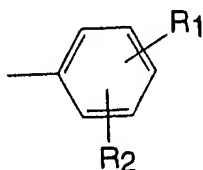


wherein R<sub>1</sub> and R<sub>2</sub> are each independently of the other hydrogen, chloro, bromo, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkoxy, C<sub>1</sub>-C<sub>6</sub> alkylamino, CN, or phenyl; G is -O-, -NR<sub>7</sub>-, -N=N-, or -SO<sub>2</sub>-; R<sub>7</sub> is hydrogen, methyl, or ethyl; and R<sub>3</sub> and R<sub>4</sub> are hydrogen.

55. (Original) The color filter according to claim 53, wherein A and B in formula (V) are identical to each other.

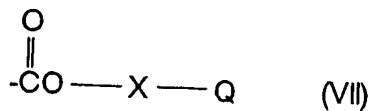
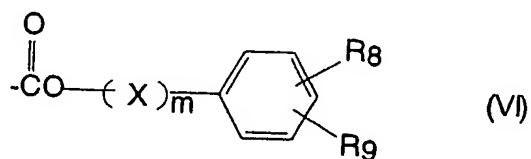


56. (Original) The color filter according to claim 55, wherein A and B in formula (V) are a group of formula



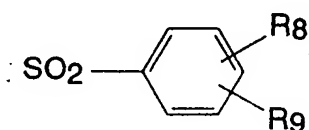
wherein  $R_1$  and  $R_2$  are each independently of the other hydrogen, methyl, tert-butyl, chloro, bromo, CN, or phenyl.

57. (Currently Amended) The color filter according to claim 53, wherein D is ~~hydrogen~~ or E, and E is a group of formula

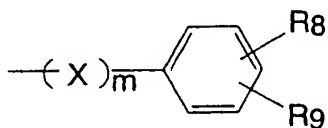


Serial No.: 10/642,212

or formula (IV) wherein, in formulae (VI), (VII), and (IV), m is 0 or 1; X is C<sub>1</sub>-C<sub>4</sub> alkylene or C<sub>1</sub>-C<sub>5</sub> alkenylene; R<sub>8</sub> and R<sub>9</sub> are each independently of the other hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl, methoxy, chloro, or -NO<sub>2</sub>; Q is hydrogen, CN, CCl<sub>3</sub>, a group of formula

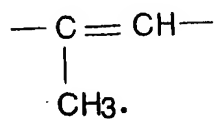
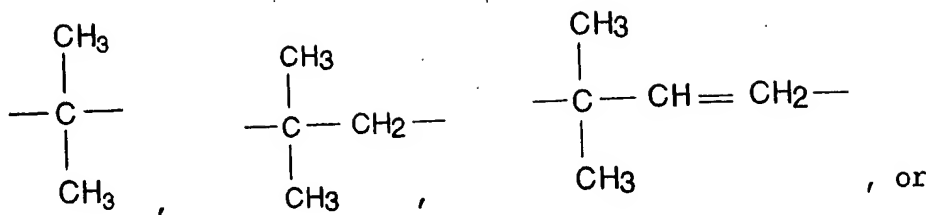


wherein R<sub>8</sub> and R<sub>9</sub> are as defined above, SO<sub>2</sub>, SH<sub>3</sub>, or SCH<sub>3</sub>; R<sub>10</sub> and R<sub>11</sub> are each independently of the other hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl, or a group of formula

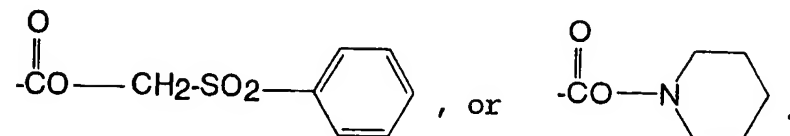
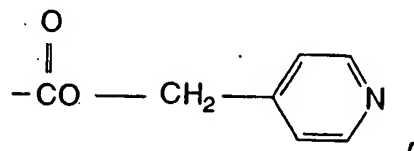
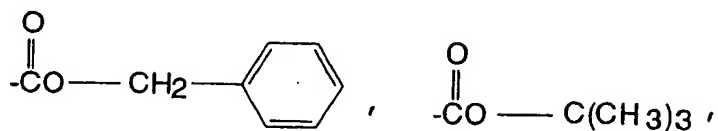


or R<sub>10</sub> and R<sub>11</sub>, taken together, form a piperidiny1 radical, with the proviso that, if D and/or E are a group of formula (IX) (VII) and Q is hydrogen, X is a group of formula

Serial No.: 10/642,212



58. (Original) The color filter according to claim 53, wherein D and E in formula (V) are identical to each other and are a group of formula

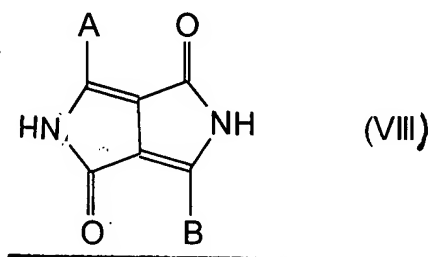
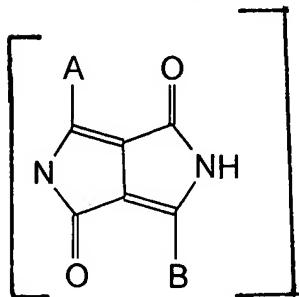


59. (Original) The color filter according to claim 53, wherein the pyrrolo[3,4-c]pyrrole derivative of formula (V) is produced by reacting the pyrrolo[3,4-c]pyrrole of formula (I) in a solvent including a lower alcohol and in the presence of a base as a catalyst.

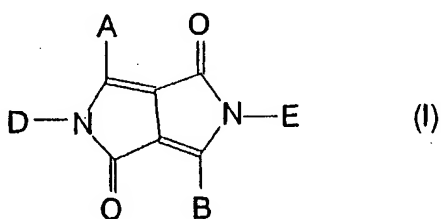
60. (Currently Amended) The color filter according to claim 59, wherein the reaction is carried out at a temperature of 0 to 400°C, ~~preferably a temperature of 20 to 200°C,~~ for 2 to 80 hr.

61. (Canceled)

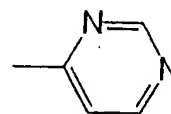
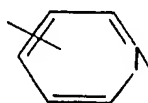
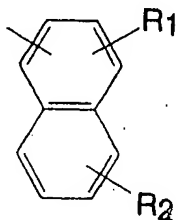
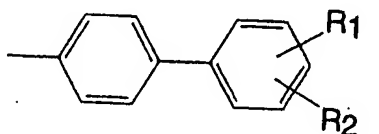
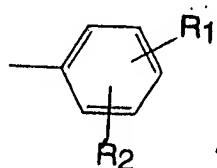
62. (Currently Amended) The color filter according to claim 53, wherein the colored layer further contains a coloring material containing as its component a pyrrolo[3,4-c]pyrrole of formula



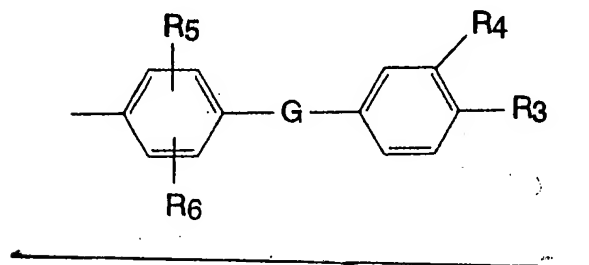
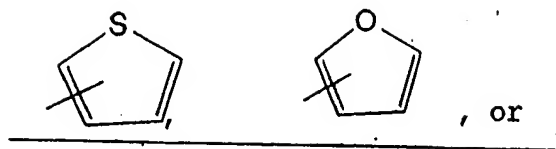
wherein A and B are as defined in formula (I),  
 which has been produced in situ by thermal decomposition,  
 photolysis, or chemical decomposition of the pyrrolo[3,4-  
 c]pyrrole derivative ~~according to claim 53~~ produced by  
converting at least one ketopyrrole group in a pyrrolo [3,4-c]  
pyrrole of the formula



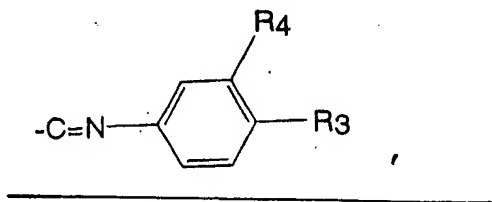
wherein A and B are each independently of the other a group  
of formula



Serial No.: 10/642,212

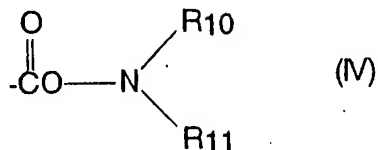
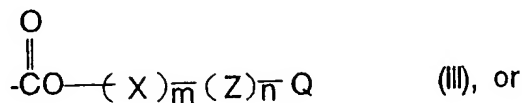
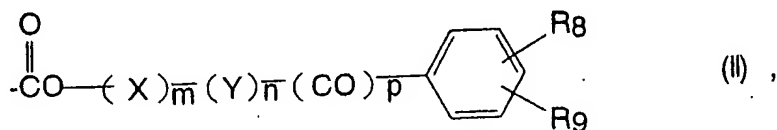


wherein  $R_1$  and  $R_2$  are each independently of the other hydrogen, halogen,  $C_1-C_{18}$  alkyl,  $C_1-C_{18}$  alkoxy,  $C_1-C_{18}$  alkylmercapto,  $C_1-C_{18}$  alkylamino,  $-CN$ ,  $-NO_2$ , phenyl, trifluoromethyl,  $C_5-C_6$  cycloalkyl,  $-C=N-(C_1-C_{18} \text{ alkyl})$ , a group of formula

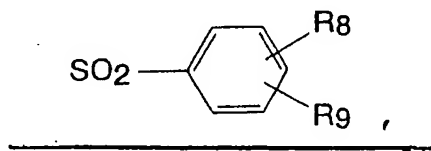


imidazolyl, pyrrazolyl, triazolyl, piperazinyl, pyrrolyl,  
oxazolyl, benzoxazolyl, benzothiazolyl, benzimidazolyl,  
morpholinyl, piperidinyl, or pyrrolidinyl; G is -CH<sub>2</sub>-, -CH(CH<sub>3</sub>)-,  
-CH(CH<sub>3</sub>)<sub>2</sub>-, -CH=N-, -N=N-, -O-, -S-, -SO-, -SO<sub>2</sub>-, or -NR-; R<sub>3</sub> and  
R<sub>4</sub> are each independently of the other hydrogen, halogen, C<sub>1</sub>-C<sub>18</sub>  
alkoxy, or -CN; R<sub>5</sub> and R<sub>6</sub> are each independently of the other  
hydrogen, halogen, or C<sub>1</sub>-C<sub>6</sub> alkyl; and R<sub>7</sub> is hydrogen or C<sub>1</sub>-C<sub>6</sub>  
alkyl; and

D and E are each independently of the other a group of  
formula



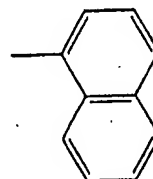
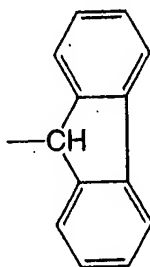
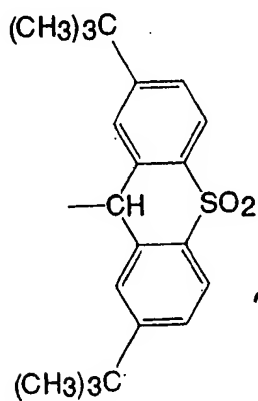
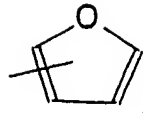
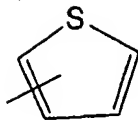
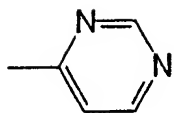
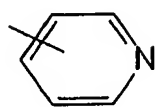
wherein, in the formulae (II), (III), and (IV), m, n, and p are each independently of one another a number of 0 or 1; X is C<sub>1</sub>-C<sub>14</sub> alkylene or C<sub>2</sub>-C<sub>6</sub> alkenylene; Y is a group -V-(CH<sub>2</sub>)<sub>q</sub>-; Z is a group -V-(CH<sub>2</sub>)<sub>r</sub>-; V is C<sub>3</sub>-C<sub>6</sub> cycloalkylene; q is an integer from 1 to 6; r is an integer from 0 to 6; R<sub>8</sub> and R<sub>9</sub> are each independently of the other hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, halogen, CN, NO<sub>2</sub>, unsubstituted phenyl or phenoxy, or phenyl or phenoxy which is substituted by C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, or halogen; and Q is hydrogen, CN, Si(R<sub>8</sub>)<sub>3</sub>, a group C(R<sub>12</sub>)(R<sub>13</sub>)(R<sub>14</sub>) wherein R<sub>12</sub>, R<sub>13</sub>, and R<sub>14</sub> are halogen, a group of formula



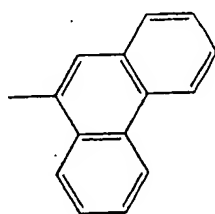
wherein R<sub>8</sub> and R<sub>9</sub> are as defined above, a group SO<sub>2</sub>R<sub>15</sub> or SR<sub>15</sub> wherein R<sub>15</sub> represents phenyl which is substituted by a C<sub>1</sub>-C<sub>4</sub> alkyl, a C<sub>1</sub>-C<sub>4</sub> alkoxy, or a halogen, or a group of formula



Serial No.: 10/642,212

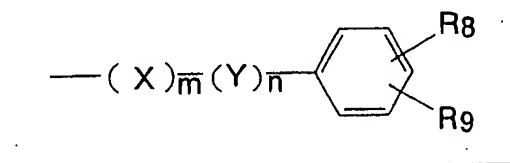


, or



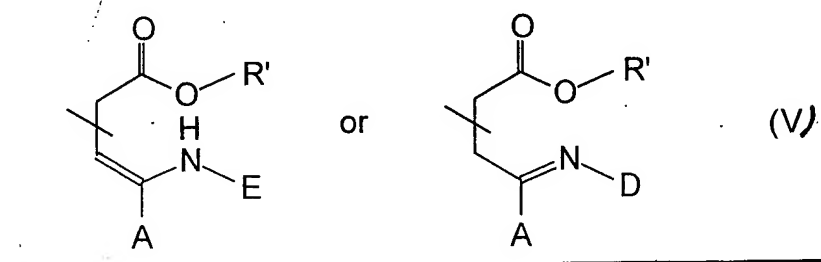
; and

R<sub>10</sub> and R<sub>11</sub> are each independently of the other hydrogen C<sub>1</sub>-C<sub>18</sub> alkyl, or a group of formula



wherein X, Y, R<sub>8</sub>, R<sub>9</sub>, m, and n are as defined above, or R<sub>10</sub> and R<sub>11</sub>, together with the linking nitrogen atom, form pyrrolidinyl, piperidinyl, or morpholinyl radical; and D may be hydrogen with the proviso that, if D and/or E are a group of formula (III), Q is hydrogen, and n is 0, m must be 1 and X must be a C<sub>2</sub>-C<sub>14</sub> alkylene or C<sub>2</sub>-C<sub>8</sub> alkenylene group which is branched at the carbon atom attached to the oxygen atom,

said at least one ketopyrrole group being converted to



wherein A may be B with the proviso that, if A is B, D is E; and R' is C<sub>1</sub>-C<sub>5</sub> alkyl.

63. (New) The color filter according to claim 59, wherein the reaction is carried out at a temperature of 20 to 200°C.